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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 09/966,970 | 09/28/2001 | Jeffrey D. Harper | 33257/236160 | 5811 |
| 826 | 7590 | 04/05/2005 | EXAMINER | |
| | | | TUNG, KEE M | |
| ALSTON & BIRD LLP BANK OF AMERICA PLAZA 101 SOUTH TRYON STREET, SUITE 4000 CHARLOTTE, NC 28280-4000 | | | ART UNIT | PAPER NUMBER |
| | | | 2676 | |

DATE MAILED: 04/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 09/966,970 | HARPER, JEFFREY D. | |
| | Examiner | Art Unit | |
| | Kee M Tung | 2676 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 17 December 2004.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-3,5-10,12,14-16,18-20,23-25 and 27-52 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-3,5-10,12,14-16,18-20,23-25 and 27-52 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

| | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>12/23/04</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The amendment filed 12/17/04 has been considered in preparing this Office action. New claims 28-52 are added.

Drawings

1. Figures 2 and 3 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.
2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "memory control elements" (claims 33-45) and "the memory control element includes an image processing module" (claim 39) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure

is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 33-45 and 46-52 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The original filed specification fails to support the newly recited "memory control element" (claims 33-45 and similar steps or features also recited in method claims 46-52) and "the memory control element includes an image processing module for processing the image data" (claim 39).

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3, 5-10, 12, 14-16, 18-20, 23-25 and 27-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted Prior Art, figures 1 and 3 of the drawings and the respective areas of the specification (hereinafter "Prior Art") in view of Rao et al (WO 97/06523 hereinafter "Rao").

Prior Art teaches an imaging device for simultaneous image capture and image display updating (Fig. 1) comprising an imager (20) for capturing image data upon aiming the imager at an image; a CPU (30) that is in communication with the imager and issues commands to capture image data; a DMA module in communication with the imager and the CPU that executes the commands to capture image data; a memory module (60) in communication with the CPU and the DMA module includes a buffer (70); an image enhancer (see step 110 in figure 3) for enhancing image data stored in the first and second image capture buffers prior to display and reformatting the image data. However, Prior Art fails to explicitly teach or suggest the memory module includes two buffers and functions as doubled buffering while one is writing from CPU and the other buffer is refreshing (reading) the screen. This is what Rao teaches (Fig. 1, buffers 110 and 111 and page 15, first full paragraph). It would have been obvious to one of ordinary skill in the art at the time the present invention was made to combine the

teachings of Rao into the system of Prior Art in order to obtain the advantages as taught by Rao (pages 6-9). Therefore, at least claims 1-3, 5-10, 12, 14-16, 18-20, 23-25 and 27 would have been obvious.

New claims 28-52 are similar in scope to claims 1-3, 5-10, 12, 14-16, 18-20, 23-25 and 27, and additionally require an portable data acquisition and display device (Fig. 1 and respective area of the specification) includes an image barcode reader (claim 33, which would have been obvious in view of the imager 20 of figure 1 because an image barcode reader or image scanner etc are considered one of the imager and can be replaced one from another by one ordinary skill in the art without any burden.) and a memory control element (claim 33, such as, core logic 103 or address logic 112 and data logic 114). Therefore, the newly added claims 28-52 also would have been obvious by the combination of Prior Art and Rao.

Response to Arguments

3. Applicant's arguments filed 12/17/04 have been fully considered but they are not persuasive.

The rejection has been modified in order to fully consider applicant's amendments and remarks.

Basically, applicant argues that Rao fails to teach or suggest an image enhancer, reformatter and a barcode reader. The examiner agrees. However, the 35 USC rejection is based on Applicant's admitted Prior Art and Rao. Applicant's admitted Prior Art teaches every limitation except the double buffering feature and the examiner added Rao to teach or support that to replace a single buffer by a double buffer would have been obvious to one of ordinary skill in the art and is well known and well used in the

art. Applicant argues the patentability of claims by individually addressing the references used to reject the claims. It is noted that the claims above are rejected as being obvious using a combination of the references. Applicant cannot show non-obviousness by attacking references individually where, as here the rejections are based on combination of references, i.e., Applicant's admitted Prior Art and Rao. In re Keller, 208 USPQ 871 (CCPA 1981).

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

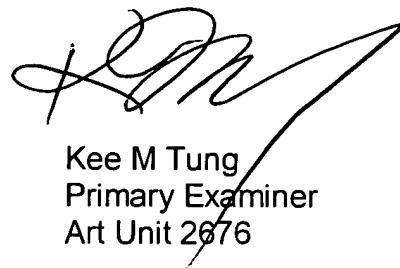
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kee M Tung whose telephone number is 571-272-7794. The examiner can normally be reached on Tuesday - Friday from 5:30 am - 4:00 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Bella can be reached on 571-272-7778. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Kee M Tung
Primary Examiner
Art Unit 2676